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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/815,460      | 04/01/2004  | Jeffrey S. Dugan     | 038675/276255       | 6395             |

826 7590 07/29/2005

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| EXAMINER |
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EDWARDS, NEWTON O

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| ART UNIT | PAPER NUMBER |
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1774

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/815,460

Applicant(s)

DUGAN, JEFFREY S.

Examiner

N Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,7-13 and 19-28 is/are pending in the application.
- 4a) Of the above claim(s) 8,11 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,7,9-10,12,13,20-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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Chris Humphrey was given an election of species requirement on new claim 20 on 6/27/2005. Applicant elected polylactic acid for claim 20.

Applicant urges that 1) claim 8 should be examine since it is within the scope of claim 10.

Okay. New claim 19 is withdraw from further consideration as being directed to a nonelected invention of Group II.

Applicant urges that 2) all the species and all claims should be search and Examined with out serious burden or the examiner.

To conclude the above with no evidence is not persuasive. A serious burden was shown by Examiner by the separate classification, separate status in the art, and the different filed of search in the restriction. See MPEP 803. The restriction requirement is deemed proper for reasons of record and hereby made FINAL.

Applicant's arguments filed 6/16/05 have been fully considered but they are not persuasive.

Applicant urges that 1) Kloos reference does not suggest to form a fiber wherein the surface comprises both a biodegradable synthetic polymer and a plurality of low friction particles.

Kloos and the other references disclosure of polyester, for example, is generic to aromatic or aliphatic polyesters. The term polyester includes biodegradable and

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nonbiodegradable polyester such as polylactic acid (PLA). Reading claim 1 in light of the specat page 6, line 30 the term biodegradable is not limited to a degradation time or type of polymer, it only requires any polymer to have the ability to degrade in the presents of bacteria, fungi etc. Snyder or Halm or Kloos or Van Anholt or Kurihara teaching of polyesters or polyamide polymers all have the ability to degrade over time in the present of a bacteria etc. The foregoing is a part of all the rejections of record.

Applicant urges that 2) Kloos Van Anhot and Kurihara fail to teach or suggest use of a biodegradable synthetic polymer with a low frictions particles.

Regarding the issue of biodegradable see above for a response. All the above reference teach the PTFE particles (which is the low friction material) are mixed with the polymer yielding a low friction material portion exposed surface of the fiber.

Applicant urges that 3) Snyder and Halm also fail to teach a biodegradable synthetic polymer.

Regarding, the issue of biodegradable see argument 1 for a response. Kloos, van Anholt, and Kurihara were cited in the 103 rejection to teach PTFE particles (low friction material) not Snyder or Halm.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 8, 9, 10, 12, 13, 20-26, and 28 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kloos for reasons of record.

Kloos further teaches the PTFE is a micro powder which mean the diameter is about 1 micron.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 8, 9, 10, 12, 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Van Anholt for reasons of record.

Claims 1, 7, 8, 9, 10, 12, 13, 20-26, and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kurihara for reasons of record.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder or Halm taken with Kurihara or Kloss for reasons of record.

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Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder or Halm as applied to claim 13 above, and further in view of Tsai (US 6,261,677) or Dugan (6,411,267).

Snyder or Halm in view of Kloss or Kurihara teach all of the claimed invention except the polylactic acid (PLA).

Dugan or Tsai teach it is well known in the art to incorporate a PLA polymer in a fiber to render it biodegradable.

Hence, it would have been obvious to one having ordinary skill in the art to incorporate PLA, as taught by Dugan or Tsai, in the fiberfill, as taught by Snyder or Halm in order to render the polyester fiberfill biodegradable faster.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kloss or Kurihara in view of Tsai (4,562,616,677) or Dugan (6,441,267).

In the alternative, Kloss or Kurihara teach all of the claimed invention however is silent to polylactic acid (PLA). Both Dugan and Tsai teach it is well known to use PLA in fibers in order to render the fiber biodegradable. Both Dugan and Tsai teach PLA is an aliphatic polyester. See column 6, Line 40 of Tsai, for example.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the PLA, as taught by Tsai or Dugan, in the fiber, as taught by Kloss or Kurihara in order to render the polyester fibers biodegradable at a faster rate.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited patents disclose the state of the prior art.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Newton Edwards whose telephone number is 571-272-1521. IF attempts to reach the examiner by telephone are unsuccessful after 24 hours, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edwards/af  
July 6, 2005



**N. EDWARDS**  
**PRIMARY EXAMINER**